What is claimed is:

1. A segmented arm support apparatus for attachment to a surgical retractor, comprising:

an articulating arm having a plurality of segments, each segment having an outer wall and an inner surface with a passage extending through each segment, the outer wall of a first segment in mating relationship with the inner surface of a second segment, each segment being formed of a material with high stiffness coated with a high friction plating material;

a cable extending through the passage of each segment;

a device for tightening the cable, thereby causing the mating segments to be brought into tight frictional engagement and compressing the plating material; and

a tissue stabilization device attached to the articulating arm, the stabilization device being lockable upon tightening the cable.

- 2. The segmented arm support apparatus of claim 1, wherein each segment is defined by a convex outer wall and a concave inner surface.
- 3. The segmented arm support apparatus of claim 2, wherein the convex outer wall of the first segment engages the concave inner surface of the second segment.
- 4. The segmented arm support apparatus of claim 1, wherein the material with high stiffness comprises stainless steel.
- 5. The segmented arm support apparatus of claim 1, wherein the mating relationship exists between each segment.
- 6. The segmented arm support apparatus of claim 1, wherein the high friction plating material is softer than the material with high stiffness.

- 7. The segmented arm support apparatus of claim 1, wherein the high friction plating material is selected from the group consisting of nickel, gold, silver, copper, tin, and an elastomer.
- 8. The segmented arm support apparatus of claim 1, wherein the high friction plating material comprises nickel.
- 9. The segmented arm support apparatus of claim 1, wherein during tightening of the cable, the high friction plating material of adjacent segments frictionally engages.
- 10. The segmented arm support apparatus of claim 1, wherein the stabilization device is removably attached to the segmented arm support apparatus.
- 11. The segmented arm support apparatus of claim 10, and further including a movable socket to receive the stabilization device.
- 12. The segmented arm support apparatus of claim 11, wherein the movable socket is slidable along a plunger attached to an end of the cable.
- 13. The segmented arm support apparatus of claim 12, wherein the movable socket is biased against the plunger by a spring.
- 14. The segmented arm support apparatus of claim 1, and further including a mounting block for attachment to a retractor.
- 15. The segmented arm support apparatus of claim 14, the mounting block including a lever for positioning a cam to engage the retractor.

16. A method for stabilizing a localized area of tissue on a patient, comprising the steps of:

providing a segmented arm support apparatus including an articulating arm with a plurality of segments, each segment having an outer wall, an inner surface, and a passage for receiving a cable, the outer wall of a first segment in mating relationship with the inner surface of a second segment, each segment being formed of a material of high stiffness coated with a plating material;

providing a stabilization device attached to the articulating arm; and tightening the cable so that the plating material of the first and second segments frictionally engages, thereby causing the stabilization device to lock.

- 17. The method of claim 16, wherein the material of high stiffness comprises stainless steel.
- 18. The method of claim 16, wherein the plating material is selected from the group consisting of nickel, gold, silver, copper, tin, and an elastomer.
- 19. The method of claim 16, wherein the plating material comprises nickel.
- 20. The method of claim 16, wherein the stabilization device is removably attached to a socket in the articulating arm.
- 21. The method of claim 16, and further including a step of replacing the stabilization device by loosening the cable and removing the stabilization device from a socket.
- 22. The method of claim 21, wherein the socket is biased against a plunger housing an end of the cable.
- 23. The method of claim 16, and further including a step of mounting the segmented arm support apparatus on a retractor.

24. The method of claim 23, wherein the mounting step includes manually rotating a lever connected with a cam that attaches to the retractor.